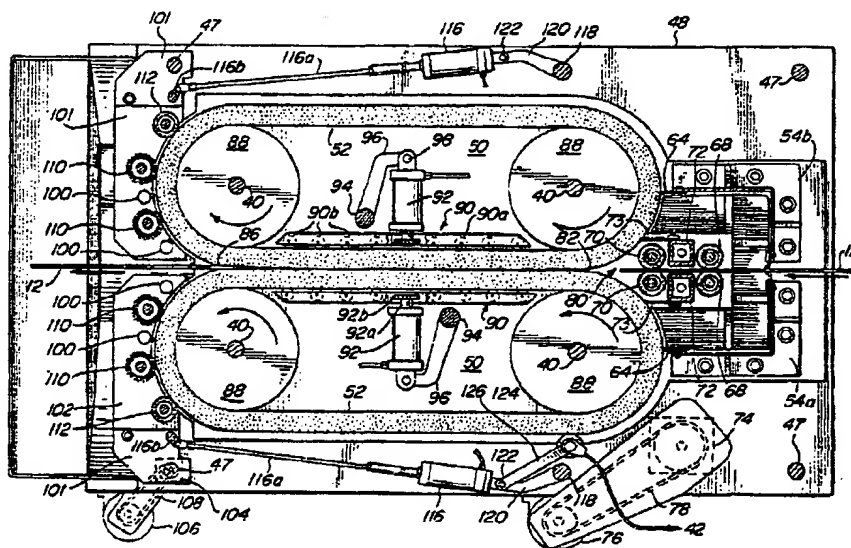


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>5</sup> : B05D 1/00		A1	(11) International Publication Number: WO 95/08403
			(43) International Publication Date: 30 March 1995 (30.03.95)
(21) International Application Number: PCT/US93/08950		(81) Designated States: AU, BR, CA, JP, KR, RU, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 20 September 1993 (20.09.93)		Published With international search report.	
(71) Applicant (for all designated States except US): VELIE CIRCUITS, INC. [US/US]; 1267 Logan Avenue, Costa Mesa, CA 92626 (US).			
(72) Inventor; and			
(75) Inventor/Applicant (for US only): VELIE, Larry, N. [US/US]; 24111 Brookfield Circle, Lake Forest, CA 92630 (US).			
(74) Agent: JACKSON, Harold, L.; Jackson Law Corporation, 17592 Irvine Boulevard, Tustin, CA 92680 (US).			

(54) Title: METHOD AND APPARATUS FOR SOLDERING CIRCUIT BOARDS



**(57) Abstract**

A method and apparatus for depositing solder on the terminal pads (10) of printed circuit boards (12) in which a solder resist layer (16) or layers (16, 17) having a thickness corresponding to the desired solder height border the pads. Molten solder from a reservoir (58) is directed by nozzles (72) against the sides of the board (12) to fill the cavities extending above the terminal pads while the board (12) is moving via a conveyor mechanism relative to the reservoir (58). The cavities when filled with molten solder are covered by a suitable element such as a flexible belt (52) or roller. The molten solder within the covered cavities is then cooled below its solidification point and the covering element removed. If desired, part or all of the solder resist layer (16) or layers (16, 17) may then be stripped from the board (12) to leave solder pads extending above the surface of the board (12).